

Title (en)

Thin-film semiconductor device

Title (de)

Dünnschicht-Halbleitervorrichtung

Title (fr)

Dispositif semi-conducteur à film mince

Publication

**EP 0488801 B1 19980204 (EN)**

Application

**EP 91311142 A 19911129**

Priority

- JP 33887990 A 19901130
- JP 33888090 A 19901130

Abstract (en)

[origin: EP0488801A1] A thin-film semiconductor device having a CMOS inverter comprising a pair of n-type and p-type thin-film transistors, wherein the gate electrode of at least one of the paired thin-film transistors comprises a plurality of gate electrode sections spaced apart along the channel length. The channel region of the n-type thin-film transistor is doped with p-type impurities. This structure serves to reduce the leakage current and maintain high OFF resistance for a high source-drain voltage. Further, since a good symmetry of characteristics is maintained between the n-type and p-type thin-film transistors that constitute the CMOS inverter, no appreciable bias is caused in the output voltage of the CMOS inverter. <IMAGE>

IPC 1-7

**H01L 27/12**; H01L 29/786

IPC 8 full level

**H01L 27/12** (2006.01)

CPC (source: EP KR US)

**H01L 27/12** (2013.01 - EP US); **H01L 29/78** (2013.01 - KR)

Cited by

US7166503B2; SG135930A1; EP0582486A3; US6777763B1; US6815772B2; US6259120B1; US6337232B1; US6541795B2; US6797550B2; US7319055B2; US7635883B2; US6911358B2; US7129121B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0488801 A1 19920603**; **EP 0488801 B1 19980204**; DE 69128876 D1 19980312; DE 69128876 T2 19980806; KR 920010957 A 19920627; KR 950003943 B1 19950421; US 5528056 A 19960618

DOCDB simple family (application)

**EP 91311142 A 19911129**; DE 69128876 T 19911129; KR 910021949 A 19911130; US 39262195 A 19950222